

Title (en)

SHEET MOLDING COMPOUND AND FIBER-REINFORCED COMPOSITE MATERIAL

Title (de)

BAHNFORMVERBINDUNG UND FASERVERSTÄRKTES VERBUNDSTOFFMATERIAL

Title (fr)

MÉLANGE À MOULER EN FEUILLES ET MATÉRIAU COMPOSITE RENFORCÉ PAR DES FIBRES

Publication

**EP 3838970 A1 20210623 (EN)**

Application

**EP 19889684 A 20191101**

Priority

- JP 2018220984 A 20181127
- JP 2019042995 W 20191101

Abstract (en)

The present invention enables the achievement of: an SMC which has excellent flexibility, while being suppressed in tackiness; and a fiber-reinforced composite material which uses this SMC, thereby being reduced in voids after molding. In order to achieve the above, a sheet molding compound according to the present invention has the configuration described below. Specifically, a sheet molding compound according to the present invention is formed from reinforcing fibers and a resin composition, and has a weight content of the fibers of from 40% to 60% (inclusive) and an air bubble content of from 5% by volume to 30% by volume (inclusive), while satisfying the formulae below in a dynamic viscoelasticity measurement at 25°C.  $10 < \sup > 5 < \sup > \text{Pa} \leq G'(\text{s}) \leq 10 < \sup > 9 < \sup > \text{Pa}$   $1 \leq G'(\text{s}) / G''(\text{s}) \leq 5$   $G'(\text{s})$ : storage elastic modulus (Pa) of sheet molding compound at 25°C  $G''(\text{s})$ : loss elastic modulus (Pa) of sheet molding compound at 25°C

IPC 8 full level

**C08J 5/04** (2006.01)

CPC (source: EP US)

**C08G 18/0842** (2013.01 - EP); **C08G 18/168** (2013.01 - EP); **C08G 18/1875** (2013.01 - EP); **C08G 18/2027** (2013.01 - EP); **C08G 18/58** (2013.01 - EP); **C08G 18/7664** (2013.01 - EP); **C08G 18/7671** (2013.01 - EP); **C08G 59/4021** (2013.01 - EP); **C08J 5/042** (2013.01 - US); **C08J 5/243** (2021.05 - EP); **C08L 63/00** (2013.01 - EP US); **C08G 2120/00** (2013.01 - EP); **C08J 2363/00** (2013.01 - EP US); **C08J 2475/00** (2013.01 - US); **C08J 2479/00** (2013.01 - EP); **C08L 2205/03** (2013.01 - US)

C-Set (source: EP)

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